The Open Court.

A WEEKLY JOURNAL

Devoted to the Work of Conciliating Religion with Science.

No. 149. (Vol. IV.—19) CHICAGO, JULY 3, 1890. Two Dollars per Year. Single Copies, 10 Cts.

THE FALLACIES OF REALISM.

BY W. R. THAYER.

During the past century Democracy has been supplanting Feudalism. Society no longer means—as in the days of absolute monarchies—merely a royal beast and a few thousands of noble, clerical, and military parasites,—all the rest of the world being but fodder for his appetite; but it includes everybody, high and low, best and worst. Each class, each individual has significance; all shall be heard. And Literature, which is the truest expression of human society, no longer confines itself to recording the adventures of dukes and princes and the amours of ladies of noble birth, but it has become unreservedly democratic. But the literary catholicity, which is associated with this modern social system, is not new. It does not belong, as the recent advocates of Realism in Fiction would persuade us, peculiarly to that method. You need but to turn to the two oldest masterpieces in literature—the epics of Homer and the *Book of Job*—for imperishable examples of catholicity. To be sure, many of the personages in the Homeric epics, and in the dramas of Æschylus and Sophocles, are gods and demigods, kings and princes; but we are interested in them, and cultivated readers will always be interested in them, because they are—in spite of Olympian and royal externals—so very human at heart. Nor has it been observed that snobs and tuft hunters in either hemisphere, who parade their acquaintance with the aristocratic or the illustrious, are devoted students of Shakespeare, although many of the characters in his plays bear royal titles. Not the least of the inestimable lessons we learn from Shakespeare is this: that the elemental passions are common throughout human nature, differing in degree but not in kind, and not to be put off or on with this or that symbol of social position. A simple lesson, indeed; but not so simple but that the majority have failed as yet to master it; for the majority still persist in regarding the mere wearing of the symbol as evidence that the wearer has a right to it: the black gown of the priest, the white necktie or surplice of the clergyman, presumably endow their wearers with piety; a sheep's-wool wig, by some mysterious virtue, communicates to the head beneath it all the dignity and wisdom of Jurisprudence herself. So we do not exaggerate, when we say that the endeavor of enlightened men in literature and in public life has been from the beginning, to show the exact nature of the substance of each symbol, to point out the misuse of symbols and to condemn their perpetuation, whether in religion, or in politics, or in social affairs, after the qualities which they once denoted, have ceased to exist. And just as far as Realists accomplish this, they carry on the beneficent work of great men in all ages, and deserve our approval.

The modern Realist, as represented by Zola, differs from the past masters of literature from Homer to Goethe and George Eliot, not because he alone deems any human being worthy of delineation, but (1) because he studies mankind from the point of view of the naturalist, and (2) because he would employ only the faculty of observation to the exclusion of the creative faculty. Let us examine a little what these mean.

The Realist assumes, in the first place, that, because man belongs by his physical constitution to the "Animal Kingdom," the novelist should use in studying men those methods which the naturalist uses in studying a rabbit or an oyster. Regarding man as a material organism, the Realist assumes, further, that all the processes of human thought, all the operations of the moral and æsthetic faculties, can be reduced to chemical or dynamic terms. In other words, he limits himself to materialistic methods and explanations. This being true, we might from the start predict, that a school of fiction which proposes by materialistic methods to study and interpret human thought in its highest manifestations—in motives, that is, and in passions—must be inadequate.

Zola assumes, that, since medicine which had been treated as an art, could be and ought to be treated as a science, a similar reform is possible in the treatment of fiction. I will not pause to give my reasons for believing that medicine itself can never be an exact science, but I wish to point out, how very dangerous, how very unscientific, the assumption is in itself. Common sense tells most of us that reasoning from analogy is not the same as reasoning from facts; and experience is ever busy to confound and punish us when we do not heed this teaching. The physician has a definite end in view, and to achieve it he employs certain methods: the novelist has also a definite end, but not at all that of the physician: to assume,

therefore, that the methods which help the physician will consequently be the most serviceable to the novelist, is to disregard the fact that their provinces and aims are not identical. Yet on this assumption, which he accepts as a fundamental axiom not needing proof—on this inference from analogy—M. Zola rests and builds his system of Realism. Here is science, indeed! Let us take an illustration by which the absurdity of basing arguments on analogy may be made perfectly plain: A gardener has a son to bring up, but having had no experience in educating children, he assumes, that his method of raising plants is suitable for this case. So he carries the boy into the green-house and sets him into a large flower-pot, and keeps him upright by tying him to a stout stick: and of course he does not omit the manure round the feet, or the sprinkling with a douche twice a day; and the temperature of the green-house is kept uniformly at 80°: and if the gardener be like all other gardeners, he will write the boy's name in Latin with a pencil on a slip of wood, and stick this into the earth near the little specimen's feet, so that every visitor may puzzle over it and mispronounce it. Very possibly, the child's cries may inform the father of his mistake ere it be too late; but what shall we say to men who announce that they possess the only true system of writing novels and poems, and of painting pictures, and who yet gravely fortify themselves with reasoning from analogy not a whit less illogical than that of the gardener? But you may declare, and may with reason declare, that, although inference from analogy is never scientific and often leads to absurdity, as in the imaginary case I have just cited, yet there are instances in which the same method can be properly applied to two very different kinds of work; and you may ask whether this may not be true of science and novel-writing. Let us, therefore, examine the matter a little farther.

In the first place, the purpose of literature, and not of literature only but of all high arts, is not identical with the purpose of science. Man being many-sided, nature and human nature present divers aspects to him: there is the aspect of facts, of knowledge, of which science is the interpreter; there is the aspect of morals, of conduct, which is the domain of religion, of ethics; there is, finally, the aspect of beauty, of which art is the expression: all distinct and mutually independent, yet so mysteriously connected that he who penetrates deepest, sees in each the light of all. Here again, an example or two may serve us: A geologist looks upon a mountain-range as a volume of geological facts; a painter looks upon it as a landscape, and tries to express through the medium of drawing and color the sentiments it has stirred in him. To an anatomist a human body is a subject to be dissected, for the better understanding of its structure and functions; but to you that same body may be a father or a sister. Niagara appears to the practical man as but a vast amount of wasted water power, which ought to be employed in turning a thousand mill-wheels; to the physicist, it is a stupendous concrete illustration of dynamic laws; to the artist, it is an object at once sublime and beautiful, the symbol not only of the eternal forces of nature, but of spiritual forces. If we seek for examples in human society, we shall find the same diversity of aspects. A burglar with a broken leg is brought to a hospital for treatment, and the surgeon—the representative of science—sets the fracture, without reference to the character of the patient; but when the burglar is brought before the court, the judge,—who represents the moral aspect, the conscience of society,—punishes him according to law. These are simple instances and self-evident, but not so simple nor so self-evident but that they have failed to convince the Realist, who proposes to describe life for us under one only of its aspects—that, namely of science; and, with an assurance common to all zealots, and to all those who mistake a fragment for the whole, he declares that his description alone is true! Nothing annoys him so much as to be reminded that the moral sense and the artistic sense are also parts of human nature, and have, therefore, an inviolable right to be interpreted and satisfied.

Even from the scientific standpoint the Realist has set for himself an insuperable task: his own personality and the personality of every human being, make it impossible for him ever to deal successfully with human nature, as the scientist deals with inanimate nature. Chemical substances are invariable; water will always be reducible to two parts of hydrogen and one part of oxygen. The moral character, the prejudices of the analyst, cannot effect this result; all that is needed, is skill enough to perform the experiment. So, too, the multiplication table and the laws of physics and astronomy, depend not at all upon human variations; but they are always verifiable by any one who has sufficient knowledge to apply the rules for their verification. Scientific facts, therefore, are not matters of opinion: but the moment we come to theories of the universe, and to the interpretations of human life, we enter the region where the character and the temperament and the knowledge of the interpreter enormously affect his conclusions. In this region, speaking in the largest sense, there are no facts, but only opinions; and these opinions rise to the dignity and cogency of laws when they have been verified by the general experience of mankind. So literature, in the words of Matthew Arnold, "is the criticism of life"; and the nature and value of his criticism, the estimate he puts on life, depends upon the personality of the critic. But Zola disregards this personality

altogether. He likens the experimental novelist to a photographer, who has but to expose his plate in order to get a required representation: but the plate in this case is the photographer's own mind, which differs in size, in clearness, and in sensitiveness from that of every other human being; and no two negatives can be identical, though they may be similar. When M. Zola hands us a view, and says: "This is the exact truth," we know that he means, "This is the truth as Zola sees it." And we take his picture, and compare it with those which Homer, and Shakespeare, and Fielding, and Thackeray, and George Eliot, and many another portrayer of life has made, and we judge by means of this comparison and by our own experience, how much of absolute truth Zola's mental camera has reproduced. Moreover, after making allowances for the flaws in M. Zola's plate,—or, as scientific investigators express it, after having found his personal equation,—we have still to set a value on the truth he illustrates; for all truths have not a common value. Some are low and cheap, as, for instance, the truth that you will wet your feet if you walk in a puddle; some are high and inestimably precious, as for instance, that truth which the human race wandered for ages before reaching it, that we should do unto others as we would have them do unto us. So that we may be obliged to say to our Realistic novelists: "We do not deny the verisimilitude of your photograph, but we object to the truth you bring, because it is vulgar and petty." We see, therefore, that the personality of the observer of human affairs must inevitably and forever prevent the achievement of that task which the Realist undertakes.

The result of his experiments—the criticism of life—will be dyed by the color of his mind. The personality of Socrates and of Shakespeare impresses itself as indelibly on their works, as that of Zola impresses itself on his work: according to our reason and experience we accept or reject the conclusions of each. Sir Isaac Newton's personality could not affect the laws of gravitation: but our opinions of life and conduct depend upon our individual nature; they will be optimistic, if we resemble Emerson, pessimistic if we resemble Schopenhauer. Claude Bernard states this clearly: "In the arts and in letters, personality dominates all. *The question there is of a spontaneous creation of the mind, and this has no more in common with the verification of the natural phenomena, in which our mind must create nothing.*" But Zola, beguiled by his seductive inference from analogy, and busy in erecting his theory of Realism, paid no attention to this unanswerable objection of his guide and master; merely expressed his surprise that Bernard should make such an objection,—as if the expression of surprise were equivalent to logical refutation. "I am at a loss to understand to what branch of literature Claude Bernard refers; without doubt he is thinking of lyric poetry." That is the scientific reply, Zola makes to the truth which invalidates his theory!

But even if a few men were so unfortunate as to possess minds as impersonal and characterless as a photographic plate, and eyes as keen as a microscope, the literal accomplishment of the aim proposed by Realists would be impossible, because the fact of personality would still dominate all mankind except themselves. Every human being is a new combination of physical and intellectual elements. He has, of course, many qualities in common with his race, but he has also that unknown quantity—his identity, his individuality—which eternally distinguishes him from every one else. Any drop of water can be resolved into its component parts of oxygen and hydrogen; but you can never resolve Brown with so many parts of Jones and so many other parts of Robinson. The points of difference which make him Brown, are precisely what have to be determined; and in every case this unknown quantity has to be solved anew, and as a complete solution would require a knowledge of every thought and of every act from birth to death of each subject; and as nobody could register his own thoughts as fast as he thinks them, not to speak of knowing and registering those of another person, we see that M. Zola and his disciples in Realism now and forever have as much chance of producing a scientific novel, as they have of bailing the ocean dry with a tea-spoon. Once more, they have been led astray by their unscientific acceptance of inference for fact. It seems plausible to conclude that those methods which Darwin employed in his study of orchids, and Lubbock in his study of ants, will suffice for the adequate interpretation of human beings! Yet Darwin could never explain *why* one orchid varied, however slightly, from another on the same stem, he could only describe the variations; and Lubbock's microscope has never pretended to see the thoughts operating in the brain of a single ant, though thought there surely is, and ants may have their language and conversation far beneath the reach of human ears. Scientific exactness being thus unattainable even at these comparatively low levels, may we not almost dare to call him rash who asserts the attainability of this result at the immeasurably higher level of human life, where the external which counts for so little, can alone be scientifically observed, while the internal—the processes of thought, the conflict of motives, all that which really distinguishes men from inferior creatures—can only be guessed at? Law unquestionably governs the world of mind as well as the world of matter, but it is a law infinitely more complex and mysterious, and can

never, I believe, be determined by callipers, nor magnifying-glass, nor crucible.

These are the insurmountable barriers which nature interposes between the Realistic Novelist and the accomplishment of his design. Nevertheless, we must admit that, by following his methods to their utmost limit, he might penetrate more deeply than has hitherto been done into the subtle relations between the body and mind. We can never know too much about the way in which the temperament is affected by its physical constitution; how they react on each other, and modify each other; and we need not fear that the minutest probing will show conclusively that thought is only a manifestation of chemico-physical processes. Such Realistic works might be invaluable, but they would no more be literature than Newton's *Principia* and Darwin's *Origin of Species* are literature: they would be classified with treatises on physiology, social economics, and medical jurisprudence. Literature is the criticism of life; not merely the statement of what a botanist, or a chemist, or a physician knows about one side of life.

A STUDY OF LAVATER.

BY ANNA OLCOTT COMMELIN.

"Your face, my Thane, is as a book,
Where men may read strange matters."
—SHAKESPEARE.

THE Egyptians are credited with being the earliest students of the human countenance, one of whom displayed his skill, at Athens, in the time of Socrates, after which Greeks and Romans became interested observers. Pliny was a believer in Physiognomy, since he wrote that "the forehead of a man is the index of sorrow: cheerfulness, clemency, and severity are read therein." Cicero said that the "countenance announces man's moral character. The glances of the eye indicate the affection of the mind within." Galen and Sir Francis Bacon have expressed belief in this science, the latter declaring that the propensities of the mind were discerned in the lineaments of the body. The Reverend John Kaspar Lavater, a citizen of Zurich, was the first to attempt to prove that Physiognomy is a science, which can be reduced to fixed rules.

In a series of remarkable essays, with many illustrations, he claims the possibility of a complete system, mental states being revealed by the occipital muscle, and the rectus superior of the eye. Lavater was inspired with a genuine love for the science, ranking no study higher, since he says, "What a ray of divinity in that countenance! Everything declares it to be a copy after a Divine Original." He does not, however, confine himself exclusively to the human face, his definition including the entire form, as he says: "by Physiognomy I mean the talent of discovering the interior man by exterior appearance.' When we consider the various expressions seen in the human hand alone, we are not surprised at Lavater's decision that Physiognomy, in a large sense, includes every feature, every attitude of body, though, in the more common acception of the word, are implied the features and expression of the face only. Some of his ideas may be of interest, as when he finds "intelligence in forehead and eye-brows, moral life in cheeks and nose, animal life in mouth and chin." Those who are interested in specific rules will find them in Lavater's works, with reference to the relation which the mouth has to the whole head, this relation determined by length of mouth viewed in profile, the angle which the line of the mouth forms with the eye, and the distance of the eye above the mouth, which should be about six times the distance of the line of the profile of the mouth. "This angle," says our author, "will be nearly a right one in a wise and good man: the more obtuse, the more it announces a character decidedly animal."

But without studying closely and depending upon the laws of angles and distances, as thus set forth, the modern student may choose to form his estimates and make his judgments by more subtle processes of spiritual cognizance, by which he may arrive at just conclusions. Lavater himself is large-minded, making many concessions, and finding in "some faces, which belong to chameleon-souls, the possibilities of what men might and ought to be." Zopyrus, detecting brutal qualities in the face of Socrates, was confirmed in his statement by the philosopher himself, we read, as he admitted that such had indeed been his traits in early life, but that, by effort, he had eradicated them.

Lavater instances many well-known faces, amongst others that of Cicero, which he characterizes as "luminous and intelligent," that of Plato in which he finds, "wisdom almost divine," and Brutus, in which he sees "unshaken firmness." "Wisdom and probity" are clear to him in Marcus Aurelius, and he discovers the "father of poets" in Homer's countenance.

"I have seen a criminal, with a face like one of Guido's angels," says one author. To this Lavater well replies that "a man born with happy disposition, with delicate and irritable fibres, may plunge into crime, and yet be better than a hundred others, who pass for good, and who are incapable of excess." And here we are reminded of the thought of the poet:

"In men whom men condemn as ill
I find so much of goodness still,—
In men whom men pronounced divine,
I find so much of sin and blot,
I hesitate to draw a line
Between the two, where God does not."

Poets, in all ages and countries, have been believers in Physiognomy. Let us take testimony from

them. Herder speaks of the eyes, as "windows of the soul." Shakspeare says, "there's no art to find the mind's construction in the face." Milton and Dryden are of the same mind, as the former says, "cruel his eye," and the latter sees "counsel" in the human countenance. "Manly majesty sate in his front, and darted from his eyes, commanding all he viewed," we read in Œdipus. In Aurora Leigh, we find:

"Then she searched through my face,—
Ay, stabbed it through and through,
Through brows and cheeks and chin, as if to find,
A wicked murderer, in my innocent face,
If not here, *there* perhaps."

Like all other studies, Physiognomy becomes one of deepest interest, when much time and thought are given to it, and the close observer will be repaid for all his efforts in the pleasure of the pursuit, and the knowledge he will acquire. He may find beauty of feature and harmonious coloring, with beauty of soul lacking. He may find the latter shining forth, under imperfect physical conditions. Aristotle, and in modern times our own Emerson, perceived in human countenances traits resembling the brute creation. Coarseness, cruelty, vanity, and shallowness betray themselves, while refinement, culture, kindness, the *spiritual* life will transform the most ordinary features.

Lavater became so skilled, after years of study, that he could distinguish the farmers from one part of England from those of another, merely by observation of the differences in their faces. The modern student will find this science a fascinating one. The profiles of Dante, Savonarola, and George Eliot resemble each other. In the faces of Shakespeare and Burns, the forehead and eyes express lofty intelligence combined with poetic sensibility. In Shelley's broad brow and feminine beauty, we recognize the rare and sensitive spirit that dwelt within, even as seen in the countenance of our own beloved Hawthorne. In that of Longfellow, we see manly strength of character with the refinement of the poet. In Lincoln's we read the record of one of earth's noblest souls. The sad eyes look forth beneath the fine brow, as if pondering on the suffering of humanity,—"with charity to all—with malice to none."

Charlotte Bronté, in her charming story Villette, describes the face of the King of Labassecour, in which she detected and knew the subtle sign of his strange visitant,—hypochondria. The authoress herself gives evidence in forehead, eyes, and features of the genius displayed in her works. The faces of Mary Howitt and Frederika Bremer are interesting as studies. The first expresses intelligence, calmness, and decision of character. The forehead of the Swedish woman, who has charmed us all with her glowing pictures of Swedish home-life, shows intelligence also, and her eyes overflow with kindness and bonhomie.

Had Cleopatra's nose been of a different shape, says one writer, the fortunes of the world would have been changed. The beauty of Helen was the cause of the Trojan war. The face of Mary of Scotland won for her many friends, and made the ill-favored queen of England her life-long and vindictive foe.

"If eyes were made for seeing,
Then beauty is its own excuse for being."

But the physiognomist will not choose the faces of Cleopatra and Mary of Scotland as ideal ones, finding no spiritual beauty in the former, and seeing weakness in the latter, though he may not specify the details of its physical development, as did Lavater when he spoke of one in which he saw "imbecility in the nose, eye, and right eyebrow."

The expression may be changed by study, by cultivation of the intellect, and virtues, and repression of the passions, as Socrates is said to have ennobled his face. The body may become but the dwelling-house for the spirit, in sympathy with it, until, in its best development, we can say with the poet:

"So every spirit, as it is more pure,
And hath in it the more of heavenly light,
So it the fairer body doth procure
To habit in: and it more fairly dight
With cheerful grace and amiable sight:
For of the soul the body form doth take,
For soul is form and doth the body make."

Who has not seen faces, defying all rules of symmetry, all laws of physiognomy, that reveal to the subtle observer the finer beauty within? And some of us, too, may have known a face that, judged by all these standards, would not be found wanting, which has given us inspiration by which to live,—a face, as Cervantes expresses it, "like a benediction," or to which we might say, in the inspired words of the dying Bunsen to his wife, "In *thy* face have I seen the *Eternal*."

LOCALIZATION OF BRAIN-ACTIVITY.

II.

LOSS OF BRAIN SUBSTANCE.

It is strange that a man may lose large portions of the cortical substance of his brain, without showing any apparent loss of faculty. If the motor centres are injured, the effect will always be an impairment of the voluntary motions of the opposite side; yet the loss of sensory or other centres in one hemisphere will not be noticeable so long as the other hemisphere remains sound—except that such half brained persons will tire more quickly than normal people. We may explain this strange fact by comparing it to the condition of a man who has lost one eye. If the loss of the eye were not noticeable (perhaps because the man wears an excellently imitated artificial eye), it would by our ordinary methods of observation be very difficult to detect the loss.

The following facts from which this rule is deduced, are collected in Hermann's "Physiologie," Vol II, 2. p. 333 :

"Berenger de Carpi tells of a young man into whose brain a body four finger-breadths in width and as many in length had been driven so deep that it lay concealed by the matter of the brain. When it was removed a certain amount of cerebral substance was lost, and thirteen days afterwards a second discharge occurred spontaneously. The man recovered, showed no diseased symptoms, lived for a long time afterwards, and attained high distinction in the Church.

"Longet knew a general who through a wound in the skull near the crown of the head had suffered a considerable loss of brain-substance. This defect permanently manifested itself by a depression in the part of the skull affected. The general preserved his activity of mind ; his correct judgment in professional matters exhibited no traces of disease ; only he was wont to tire quickly when engaged in intellectual work.

"Quesnay tells of an old servant whose right parietal bone was crushed. Every day cerebral matter oozed from the wound, and was removed. On the eighteenth day the patient fell out of bed, which resulted in further considerable losses of brain-substance. On the thirty-fifth day he got drunk ; a fresh emission of cerebral matter occurred, which was caused by the patient's tearing away in his intoxication the bandage about the wound. On the day following it could be seen that the defect reached almost to the *corpus callosum*. The patient got well ; his psychical functions were restored to their complete activity ; but he remained paralyzed on his left side.

"During the blasting of a rock, a crow-bar three feet and seven inches long and one and a quarter inches thick struck a young man, and penetrating the head in the neighborhood of the joint of the left jaw, passed through the skull and came out on the same side in the region of the forehead, having thus run through the hemisphere of the brain. The man got well, lived twelve and a half years afterwards, and apart from the blindness caused by the injury to the eye he showed no indications of abnormality, except certain fits of peevishness, caprice, and obstinacy.

"A whole hemisphere may be reduced, without injury to the psychical functions. But in that case disturbances of the motory functions on the opposite side appear regularly to set in.

"A psychically normal individual that—as it happened—was paralyzed since his birth on the right side, died of phthisis. Upon dissection the place of the right hemisphere was found to be filled with some kind of serous fluid."

THE CENTRE OF LANGUAGE.

There is a region in the cortex, a lesion of which produces almost without any exception disturbances and even loss of speech. It is accordingly called the Centre of Language. This region is situated in the island of Reil at the bottom of the fissure of Sylvius and extends over the parts adjacent to the island, especially the third frontal convolution.

The centre of language is unilateral and must be sought as a rule in the left hemisphere. However there are some exceptions. We have reason to believe that left-handed people are right-brained speakers. Left-handed people who had lost the power of speech were found to have suffered injuries in the right hemisphere, but whenever their left hemisphere happened to be affected they had not lost the power of speech.

Loss of language, or aphasia, may have various causes, and will accordingly present different symptoms. It need not at all be due to a derangement of mental powers but may be a loss merely of the motor capacity of speech. In that case it is more properly called paralysis of speech. The patient may still be able to write what he means. Yet the ability to write may be lost also ; this disease is called agraphia. Agraphia is not a paralysis of the hand ; it is a paralysis of the memories of penmanship. The hand may be able to perform all the single motions necessary for writing, but the patient has lost the power of co-ordinating these movements so as to write words ; he is like an uneducated man who has not learned how to write. In that case the patient may be able to communicate through gestures or pantomime. Should the power of making gestures be lost also, the patient may nevertheless know everything he wants and may possess full clearness of his mind ; he may think of the words even which he intends to use (as we know from patients who have recovered from such diseases), yet he is not able to communicate his thoughts.

Quite different from these forms of a paralysis of speech is the amnestic aphasia which is caused by an obliteration of the word-memories themselves. In that case, the patient can perhaps read and repeat, he can pronounce every word correctly, he can also write from dictation. The different motor centres are unimpaired, yet the words, or certain categories, are no longer at the patient's disposal. They are as if forgotten, blotted out of his memory, and wrapped in oblivion. Amnestic aphasia usually shows in post mortem examinations a destruction of the first frontal convolution on the left side where it is in relation with the island of Reil.

As a special form of amnestic aphasia we may consider the state in which ideas are not associated with their words. The ideas as well as the words are still extant, yet their connection is destroyed, the fibres of association are interrupted.

We quote from Hermann's "Physiologie" Professor Exner's report of the present state of investigation concerning the cortical centre of speech. Professor Exner says :

"If a man gives an appropriate answer to a question, the following things must, it is evident, take place within him :

(1) He must hear the words spoken ;

(2) These words must awaken in him the ideas that belong to them ;

(3) From the mental operation conducted with the help of these ideas, a resultant product must issue ;

(4) This product must be clothed in words;

(5) The central innervations necessary to the utterance of these words must be brought about; and finally

(6) These innervations must arrive at the proper muscles in their proper order and intensity.

"If the first requisite is not fulfilled, we are dealing with a deaf person; if the last is not fulfilled, most probably with a patient suffering from some affection in the *crus;* if the mental operation mentioned under (3) is not accomplished, it is a case of dementia; all other interruptions or disturbances of the above-mentioned processes, viz. (2), (4), and (5), lead to aphasia.

"Cases of diseases occur that are only to be interpreted upon the supposition that the power of comprehension of words mentioned under (2) has been lost. We have here to do with patients that are very well able to speak words but do not understand them, though their hearing be good. An example will illustrate this:*

"'A woman 25 years of age, ten days after parturition, while violently straining to relieve her bowels, suddenly became unconscious. When consciousness returned she exhibited no symptoms of paralysis, but was suffering from aphasia and paraphasia.†

"'It was with difficulty, or not at all, that she found words to speak with; she confounded or mutilated them, said "Butter" instead of "Doctor," omitted words and syllables, supplied others, used the infinitive for the determinate moods, and conjugated irregular verbs regularly. Not understanding a single word at first, she was taken to be deaf. It soon turned out however that she heard a knock at the door and even the ticking of a watch as distinctly as ever before; she distinguished the bells of two different apartments of the house by their sound, etc., etc.'

"In cases of aphasia like this, the patient stands in a relation somewhat like that in which we would conceive an intelligent animal to stand that hears well enough the language of the people about him, but does not understand it. The patient cannot properly be compared to a well person that hears a foreign language, since the latter when the name of an object is told him retains the same; but not so a person suffering from aphasia. As Kussmaul pointed out, these forms of aphasia prove that the locality of the brain with which the sensation of the sounds of single vowels and consonants is connected, is a different one from that in which an acoustical word-image is apprehended as the symbol of a concept."

"No case has come to my knowledge," Professor Exner continues, "in which this 'word-deafness' has not also been combined with 'word-blindness'; that is to say, if a patient has lost the power to associate the words he has heard with their proper ideas, he is also unable to do this with written words, although he may be able to see as well as a person in the normal condition.* In this, and in many another connection, the case of Lordat has acquired much interest and celebrity. Lordat, who was himself professor of medicine, suffered several months from aphasia, and afterwards explained in detail the condition in which he found himself during this period of illness.

"In the same way that the understanding for spoken and written words can be lost, so can the power of comprehension of figures. An accountant was able to read the number 766 figure for figure, but did not know what it meant that the figure 7 stood before the two 6's. So the understanding of written musical notes can be lost, although the patient be still able to play well by ear.

* * *

"In a second form of aphasia it is impossible for the patient to clothe the results of his thoughts in words [mentioned above under (4)], whether it be to utter the same or to put them in writing. In most cases of this kind the word is simply forgotten. If it be told the patient, he can repeat it and even write it, but immediately forgets it again. By reason of the last circumstance this form of aphasia is easily distinguishable from that first mentioned.

"It is striking that at times only single words or only nouns, very frequently names, disappear from the memory and are not again to be acquired. It also comes to pass that only parts of words are forgotten.

"Thus, Graves tells of a case, where a man, sixty-five years of age, after an apoplectic fit forgot all the proper names and substantives he knew but still recollected their initial letters. He accordingly compiled an alphabetically arranged dictionary of the substantives necessary for purposes of ordinary intercourse, and whenever in conversation an object occurred to him that he wanted to speak about he looked it up in his dictionary. If he wanted to say Cow for instance, he looked up his word under C. So long as he saw the printed name with his eye he could speak it, a moment afterwards he would be unable to do so.

"The extent to which the impairment may be modified and limited in the field of language, appears from a case of Lasègue, who came across a musician who was totally aphasic and agraphic, but could take down in notes a tune that he had heard.

"A third form of aphasia is characterized by the circumstance that the patient is able to clothe his thoughts in words but is not able to bring about the central innervations necessary to the utterance of the same [referred to above as process (5)]. That the pa-

*This case is from Schmidt (Allgemeine Zeitschrift für Psychiatrie, XXVII, p. 304, 1871); cited from Kussmaul's *Störungen der Sprache*, p. 176, Leipzig, 1877—a work to be recommended to all who are interested in the present state of knowledge upon this subject.

† This word denotes a disturbance of speech in which, instead of the words that fit the sense, other, improper words, or wholly meaningless combinations of words, are employed.

*Yet cases are known, as mentioned above, in which a paralysis of speech is not connected with a paralysis of writing or making oneself understood by signs. For an instance of aphasia not accompanied by agraphia see next page the case of the young clerk.

tients execute mental operations and also clothe the results of the same in words, appears with certainty from the fact that they are able to write them down. On the other hand they are also unable to repeat words spoken to them, and in their efforts to do this they show that the different parts of the mouth are able to execute voluntary movements—they distort their mouth and twist the tongue about, but produce only inarticulate sounds.

"'A vigorous young clerk in an attack of unconsciousness had lost completely the power of speech; no other pathological symptoms appearing. He executed with facility all movements of tongue and lips. As his duties were such that they could be attended to with the pen, he kept his position. He gave his physician a carefully prepared account of his affliction.'

"With these patients it is not a question of inability to find the innervations for certain letters as such, but the difficulty is with the *words*, which they are powerless to form. That this is true will appear from the fact that many patients with whom a remnant of speech has still remained (and who, therefore, are still able to utter single words, or it may be mutilated words), although they have the power to speak a word yet cannot speak that word when a syllable has been left out or the order of the syllables changed, nor enunciate a syllable when the order of the letters has been changed; for instance, if a patient can pronounce only the syllable *tan*, he is in that case unable to say *nat*. Secondly, this will appear from the fact, that a patient who has command of a few words will be able to pronounce a certain letter in one word and not in another.

"The following case of a patient Le Long—taken from Broca—will serve as an illustration of the condition last described as well as of cases of incomplete aphasia. 'Le Long had command of only five words, which he would add by way of supplement to the expressive gestures he usually employed; they were *oui*, *non*, *tois* (for *trois*), *toujours*, and *Le Lo* (for Le Long)—three complete words, accordingly, and two mutilated ones. With his *oui* he expressed affirmation, with *non* negation; with *tois* he expressed numerical concepts of all degrees, being able to indicate by a dexterous employment of his fingers the number he had in mind; with *Le Lo* he denoted himself; *toujours* he used when he was unable to express his thoughts by the aid of the other words he commanded. Le Long pronounced the *r* in *toujours* correctly, but omitted it in *trois*, as children do that have not yet overcome the difficulty of uniting the *r* with the preceding *t*; he had lost beyond recall this knack of articulation. The nasal sound that he articulated in *non* he could not give to the last letters of his own name.'

"It is also a remarkable phenomenon, that patients who ordinarily have command of only a few words, in moments of excitement bring out and perfectly articulate more, and sometimes even ejaculate a very long oath. Jackson reports, that aphasic patients who are unable to answer 'No' to ordinary questions, suddenly find the power of utterance of this negation when aroused to it by ridiculous questions—as 'if they are a hundred years old.'

* * *

"The processes that we have spoken of up to this point, the disturbances of which lead to aphasia proper, take place in the cortex. If the conduction towards the muscles of the innervations properly induced in the cortex is impaired, the power of speech is also naturally affected; the language of the patient becomes forced, letters are omitted, the patient stutters, lisps, and at last becomes completely unintelligible; yet this is not a case of aphasia. [This is paralysis of speech.] These disturbances of the paths of conduction may be effected in the medullary matter of the cerebral hemispheres; most frequently, however, they must be sought in the nerve-nuclei of the medulla oblongata, especially in the nucleus of the hypoglossus as well as in that of the facialis accessorius and of the vago-accessorius.

"As regards now the localization of the functions of speech in the cortex, this is a question that has been so frequently discussed during the past few decades, that it is impossible in this place to give a complete presentation of the views and arguments that have been held and propounded for and against the same. We must confine ourselves to a review of the results that may be derived with certainty from the experiments of pathologists.

"The view at present held with regard to the position and extent of the cortical province of speech, is based upon innumerable data derived from dissections of the brains of aphasic patients. It has gradually arisen through the comparison and co-operative completion of the experiments of various investigators.

"The first after Gall to assign to language a province in the brain was Bouillaud, whose theories were based upon observations and the data of dissection: Bouillaud fixed the seat of articulation of words in the frontal lobes. He did not succeed however, despite a struggle continued through many years, in establishing this idea, manifestly in consequence of the miscredit that it awakened by reason of its similarity to Gall's views. This was also the fortune of M. Dax and of his son G. Dax, who endeavored to prove by the help of a rich collection of pathological cases, that disturbances of speech regularly occur upon lesions of the left hemisphere but not upon lesions of the right. A reversion of the general opinion set in when, in the year 1861, Broca, originally an opponent of Bouillaud, adopted the doctrines of the latter in all their principal

points, and more accurately fixed them by affirming that it was the gyrus frontalis inferior sinister which must remain unimpaired if the power of speech is to be retained. The circumstance that it is the left hemisphere in whose province the special function of language belongs, he later brought into connection with the fact, that people as a rule employ this hemisphere more as well for mechanical operations as in writing, all of which is done by preference with the right hand.

"From that time on, the doctrine of the localization of the function of speech became almost generally accepted, and the only question then before scientists was, to determine with greater precision, by means of new and thoroughly examined cases, the territorial limits of this function, its individual deviations, and the conditions of preference of the left hemisphere.

"The posterior part of the gyrus frontalis inferior sinister and the island of Reil of the left side, must be regarded as the actual cortical province of speech : it is exceptional that lesions of these parts do not produce disturbances of speech. On the other hand, disturbances of speech sometimes occur even when the lesion does not affect either of these two cortical regions. But in these cases the lesions are almost always in the adjacent portions of the cortex. It is manifest that, in such exceptional cases, we have to do with important individual deviations, and that the cortical province, as it must be inferred for other reasons, is not the same in all persons.

"There is a very great number of cases which sufficiently demonstrate the part played by the left inferior convolution ; I shall cite here but a very striking one, reported by Simon. By a fall from a horse, as was found out from a section afterwards made, a man had driven a splinter of bone from the roof of the skull into the convolution in question. No other injury to the skull was discoverable. The man had arisen immediately after his fall, and was about to mount his horse again, when a physician who accompanied him asked that he submit to an examination. No symptoms of disease whatsoever, except speechlessness, were noticeable. He was able to communicate, however, by signs. He died later in consequence of inflammatory affections which followed the injury to the brain.

"According to statistics compiled by Lohmeyer, in every fifty-three cases of aphasia there are about thirty-four in which the left inferior frontal convolution is either alone the actual seat of disease or somehow stands in connection with it.

* * *

"The remarkable fact that in the production of speech the left hemisphere is so much more directly engaged than the right, is firmly established : Séguin calculated, from a collection of two hundred and sixty reports of cases of this type, that the number of instances in which aphasia arises from lesion on the left side, stands in proportion to the number of those in which impairments occur on the right side, as 14·3 : 1 ; with reference to which it must be remarked that—as has been shown by other calculations—no deception is here caused by the possible circumstance that in general more injuries occur on the left side than on the right.

"This fact, which does not wholly agree with the ideas that we are accustomed to entertain of the cortical functions in general, we must accept as such, and seek only an incomplete analogy in the circumstance referred to by Broca, that our left hemisphere must be more skillful and more practiced in the execution of mechanical operations than the right. An incomplete analogy, we say, by reason of the fact that the direct innervations of the right hand are effected unilaterally by the left hemisphere, the innervations of the muscles of speech, on the other hand, take place bilaterally.

"But to a certain extent the analogy holds. If as the result of early lesions, or from birth, the motory cortical province of the right arm is lacking, the individuals thus affected train the left arm—that is the right hemisphere—to perform mechanical tasks. Cases to this effect have been reported by Moneau, Kussmaul, and others. The same, we must presume, holds good of language. Also in two cases on record, the disturbance of the cortical province of speech dated from childhood ; and the fact that notwithstanding this these people could speak well, is undoubtedly only to be interpreted in the following way, that the island, the lowest frontal convolution, etc. of the *right* hemisphere had taken charge of the functions of language.

"In this connection a case reported by Schwarz is of interest. In a well-developed three-year old girl, during convalescence from measles, speechlessness with partial paralysis of the right arm suddenly set in. The lesion accordingly lay in the left hemisphere. The condition of the patient improved, yet the girl had to learn to talk again from the very beginning, and in so doing acted like the normal child that is learning to speak.

"The left side, accordingly, does not exercise the exclusive prerogative of the superintendence of speech.

"The analogy is still further applicable. It appears that so-called left-handed individuals, who as contrasted with the majority of men have trained their right and not their left hemisphere to perform mechanical work, also employ their right hemisphere in speech. Pye Smith, Jackson, and John Ogle, Mongié, Russel, and Wm. Ogle have observed cases that appear to substantiate this. Left-handed people, namely, had become aphasic through lesions on the right side

of the brain, and—a fact which proves more—where in a collection which Wm. Ogle made of one hundred cases of aphasia there were three left-handed men, in the case of each the lesion affected the right hemisphere." P. C.

THE MOHONK CONFERENCE AND THE EDUCATION OF THE NEGROES.

BY MRS. EDNAH D. CHENEY.

THE Mohonk Conference to consider the Education of the Negro Race in our country, was an occasion of sufficient novelty and importance to deserve more than the passing notice of the daily papers.

Two brothers, Messrs. Albert and Alfred Smiley, formerly having charge of the celebrated Friends' School in Providence, a few years ago bought a large tract of land in Ulster Co., N. Y., on which they have established two hotels which they have conducted according to their own ideas of propriety. With no sale of intoxicating drinks, allowing neither card playing, dancing, nor driving on Sunday, it was predicted that the attempt would be a failure. But so admirable has been the business management, and so welcome its quiet and order even to those who do not share their host's scruples as to amusements, that the house has been well filled for several summers. Mr. Smiley was formerly a Commissioner of Indian affairs, and he has for some years held a conference on this subject in the autumn. Believing that these meetings were productive of good, he planned to hold a conference in the early summer, and from a suggestion of Ex-President Hayes, he selected the Negro Problem as the subject to be considered.

Invitations were sent to hundreds of men and women in all parts of the Union, who had shown an interest in the welfare of the negro. Many Southerners were invited, but few came. There were however, several gentlemen of southern birth and education, who spoke well for their section of the country, and represented the finest traits of the society founded on slavery which has passed away.

Ex-President Hayes consented to preside.

No Sectarian lines were followed in the invitations, but it necessarily resulted from the sentiments and church relations of the host, and also from the fact that the Evangelical associations have done so much missionary work among the negroes, that the general tone of the meeting was decidedly evangelical, using the word in its common meaning. A few Unitarians from Boston represented another phase of religious thought, but from a feeling of courtesy they gave little expression to their dissent from the religious views generally prevalent in the conference. Without attempting to report the speeches made, which were almost all interesting, I shall try to give an idea of the current of thought in the meeting.

Many claimed that while slavery was an evil, and its abolition a blessing, it had been an instrument in the hands of Providence to bring the savage African here and educate him to labor and Christianity—Mr. Mayo said: "the only blessing the Negro had got out of slavery, was the ability to work." Reports of the work done in industrial schools were given by Gen'l Armstrong, Miss Smiley, Miss Austin, and others, and great stress was laid upon the importance of these schools in teaching the Negro order and skill in handicrafts. Miss Botume and others thought technical teaching of less value than the practical lessons of life, and Judge Tourjee thought Negroes had had a pretty long spell of compulsory education in labor, and that they were already superior to those about them in most mechanical trades. All bore witness to the wonderful progress which the colored people had made in their twenty-five years from slavery—greater than was ever known before—to their skill in many forms of labor, to the gradual improvement in their mode of life, and to their advance in morality. They were said to be gaining land and houses of their own in greater numbers than the poor whites. The evils of the credit system among the farmers were vividly portrayed. A class of small traders furnish goods to the farmer on credit, taking a lien upon his crop. The charge for stores is usually just about equal to the amount of the crop, leaving the farmer nothing for his year's labor, but a bare subsistence. It was thought by all that this system should, if possible, be broken up, and that in order to encourage the people to thrift, postal savings institutions should be established by the American government, so that the smallest sums could be laid by with safety, and interest be received when they amounted to a sufficient sum.

Very much was said about the importance of improving the homes of the people and the necessity of educating women to regulate them intelligently. Many considered the one room cabin to be a great obstacle in the progress of pure morality. The subject of mixture of races was slightly touched upon, and it was stated that sexual union between the races was less common than formerly. One speaker while giving no opinion as to the probability or desirability of future amalgamation of the races, thought all laws forbidding such marriages ought to be done away with, as it was far more conducive to morality to have legal unions than illegal ones.

The religious condition of the colored people was much discussed and abundant proof offered of the great amount of superstition existing among them, and also of the pernicious influence of many of the uneducated and often immoral preachers who gain popularity by a rude eloquence which ministers to their love of excitement. Others thought that in spite of this superficial love of excitement there was a deep undercurrent of true religious feeling in the Negro, and that the great aim should be to lead him to the religion of practical life and duty. One speaker said the old white minister was as bad as the black, and spoke of the large number who had been tried for crime. The prejudice against color was spoken of, many claiming that it was more violent in the North than in the South. It was said that it is the great hindrance to mutual good feeling between the races. Some thought it impossible to allow the union of colored and white children in the same schools—that it would only increase the animosity between them, while others believed that the result of such union in the South as in the North would lead to respect and affection.

The subject of national aid to the states having large illiterate population was brought forward, but did not receive the full discussion which its importance deserved. Yet it was evident that much difference of opinion existed. The majority believed it to be the right and duty of the national government to prevent the evils of illiterate citizenship, although many considered the Blair Bill just defeated in the Senate to be unjust in its provisions. The general subject of education was well considered, especially in the able addresses of Wm. T. Harris, Commissioner of Education, and of Mr. A. D. Mayo. Among the most striking speeches were those of Judge Tourjee, who expressed his views clearly and strongly, and of Dr. Hall of Brooklyn, who made a noble plea for the equality of the Negro—illustrated by many vivid pictures of his religious and social life.

The old plea was heard that this was a question belonging to the South and it should be left to Southern (white) men to settle it, but it was answered that it would not depend on the wish or will of Northern or Southern men what the future of this race will be, but upon the Negroes themselves, who are steadily rising, and who hold their destinies in their own hands. White men may help or may hinder them, but they cannot ultimately prevent their taking any position in life to which their own ability and character entitle them. Gen. Armstrong and others had well shown that the formation of character is to be the salvation of the Negro.

The courtesy due to a private house and invited company, prevented that full and sharp discussion of these questions, which brings out the truth in bold, strong lines, yet it helped to an attitude of mutual good-will which enabled us to look upon the views of those who differed from us more favorably than we might have done without this restraint. Certainly the good feeling of all was very apparent, and a disposition to try to look from each other's standpoint as much as possible. "Nothing of the dead but good" is hardly to be said of slavery yet, but thank God, it is *so* dead, that we can begin to look for whatever mitigated its evils and made the life of its victims endurable. It is to the credit of human nature that under a system so atrocious, and whose influence was so fearful upon both master and slave, there yet were joined so many relations of affection and respect, and traits of heroism and devotion that appeal to all that is generous in our natures. The literary and artistic power which is now revealing itself in both races at the South, will have ample scope in preserving for us the romantic and significant features of this form of society which is so rapidly passing away.

It was very good to be at the conference and all felt very grateful to Mr. Smiley for calling so goodly a company together. The whole tone of remark was brave and hopeful, and left us feeling very thankful for all the good work doing for this most important cause, but sure that the time had not come for us to slacken our efforts in behalf of the Negro, since every help now when he is putting forth his own strength is of double value. No colored man was present at the conference. Mr. Smiley's own judgment in regard to this point is to be respected, but we hope that the time will come when we shall make no question in regard to it but the true, noble men of all races who are working for humanity will meet in cordial and helpful association.

A full report of the speeches, discussions, and resolutions of the conference will soon be published in pamphlet form. We hope it will be widely circulated and read.

A REVIEWER'S VIEW OF DOGMATISM.

IN ANSWER TO CRITICISMS OF FUNDAMENTAL PROBLEMS.

HONESTY is a great virtue, and a reviewer who confesses that he has not studied the book he reviews and condemns, must be admired for his honesty. It is a pity that that is all that can be said in favor of a review of *Fundamental Problems* by Mr. John Owen, published in *The Academy* of London. Mr. Owen says:

"The author is kind enough to spare both reader and reviewer the task of reading the whole of his book, by presenting them with a syllabus of its conclusions. Thus he tells us: 'The philosophy which 'The Fundamental Problems' present is Monism. Monism holds that all existence is One. . . . . The author objects to Supernaturalism as well as Agnosticism. The method of his philosophy is a systematic arrangement of knowledge.' . . . . After this authoritative exposition little remains to be added. The book consists of a series of essays which appeared in a Chicago publication called *The Open Court*. . . . . The 'court' is 'open' only to one species of philosophy, and its judgments are as dictatorial and *ex cathedra* as if they emanated from an infallible Pope."

The quotation which Mr. Owen makes is not a quotation from *Fundamental Problems*, but from the publisher's slip which, as is customary in America, is sent with copies for review for the benefit of reviewers. The notes on the slip were neither made by me nor had I the opportunity of revising them, for they were made during my absence. How bad I feel that I cannot even accept this little bit of praise—as to having been "kind enough"—which my critic so grudgingly gives me!

Mr. John Owen reviews *Fundamental Problems* together with Mr. S. Laing's *Problems of the Future*. He says:

"'Problems' are either questions 'set' in order to be answered, or questions which, after discussion, are declared to be, for the time being, unanswerable. In one sense they may bave the significatio n of dogmas, in the other of open questions. Each of these meanings is represented by the works above named."

After having reviewed Mr. S. Laing's book, he turns to *Fundamental Problems* and declares:

"Here are problems which as I have hinted are in reality dogmas."

Now in my mind the whole purpose of problems is to be solved. Problems answered are "solutions" and not "dogmas." Dogmas are unfounded assertions. Does Mr. Owen wish me to waste time, paper, and print in discussing problems that for the time being are unanswerable. What is the use of writing and what is the use of reading about unanswerable problems? Every book written ought to be a contribution toward an answer of some problem, even if the result be negative, showing that a solution has not been gained by this or that method. Mr. Laing has the misfortune to be praised by Mr. Owen for his "cautious and undogmatic tone." Dogmas being "problems answered" Mr. Owen declares that Mr. Laing contributes nothing to an elucidation or solution of the problems of the future.

It is strange that those men who are dogmatic themselves are most prone to reproach others for their own fault. The elephant and the tiger once got into a dispute, and when both had exhausted their vocabularies of names, the elephant said: "You are the most thick-skinned creature I ever met with," and the tiger answered: "You are the most cruel, rapacious, and bloodthirsty beast upon earth." There is a moral in that fable for Mr. Owen.

How glad I would have been if Mr. John Owen had pointed out the fallacies of my reasoning—mainly in the chapter "Form and Formal Thought," which is the basis of the whole work. If my reasoning has a flaw in it, it must lie there, and from there it will wind, and be traceable like a red tape, through all the other chapters. The chapter "Form and Formal Thought" attempts to lead philosophy into a new phase of development, in so far as it is intended to be a conciliation between Mr. John Stuart Mill's empiricism and Kant's transcendentalism. The problem of the a priori lies at the bottom of all problems, be they philosophical, scientific, or ethical. How is it that we can know beforehand that twice two will always be four? It is this problem which Mr. Mill failed to solve. Kant solved it, or rather pointed out the method of its solution. Yet Kant's solution is so overgrown with thoughts of a later period, that the student of Kant is more mystified than benefitted by it.

Has Mr. Owen any idea of the importance that attaches to the solution of this problem? I doubt it very much. For if he had, he would not have disappointed me by his empty declamations.

I mind neither hostility nor animosity nor sarcasm in a critic, if he be but a real critic—a man that points out fallacies, errors, and defects. If a reviewer is a critic, he will be instructive, and I shall gladly avail myself of my opportunity to learn from him. Criticisms are intellectual food; they make our minds grow. If criticisms show us defects, they help us in mending them, and thus we gain a broader insight into, and a more correct conception of, the truth. Every word that can teach us must be welcome, and if our friends are too kind to point out our deficiencies, we must go to our enemies. They will tell us the truth, they will not conceal those things which, as they suppose, are to be blamed.

I feel grateful to every one of my many critics.* I have studied their criticisms carefully and tried to learn from them. I have been able to learn from them even though they did not convert me to their views. If there is anything to be learned from Mr. Owen, it is this: Supposing that dogmas are, as he maintains, problems answered, what can we do better than strive with might and main to become dogmatic. But let us avoid mere assertions in which Mr. Owen indulges, let our dogmas be simply statements of fact, and they will be the most useful and valuable possessions of the human mind.

P. C.

* Up to date I have received one hundred and five reviews and notices of *Fundamental Problems*

CURRENT TOPICS.

A REMARKABLE evidence of public spirit is the effort of the people of Minneapolis to assist the census takers. It appears from the papers that hundreds of citizens turned out as volunteers in their determination to "number the people." This display of civic zeal was prompted by local pride and a neighborly ambition to outnumber the people of St. Paul. A vigorous effort by the census enumerators, aided by three or four thousand volunteers, ought to give Minneapolis a half a million people; otherwise the labor will be lost. This reminds us of the struggle in 1870 between St. Louis and Chicago, resulting in a victory for St. Louis by a small majority. Fortunately for that city the United States Marshal was a resident of the town. This of itself ought not to have thrown any suspicion on the "returns," but the citizens of St. Louis in grateful appreciation of the figures gave the marshal a banquet and presented him with a service of silver, as a reward for his victory over Chicago. This raised an unpleasant suspicion that "repeating" had been done; for if the figures were correct, and the marshal had merely done his duty in the count, why should he be rewarded with a solid silver tea-service? It costs a very great sum of money to take the census, and the returns ought to be above suspicion. A melancholy postscript informs us that several "enumerators" at Minneapolis are likely to go to jail for crooked arithmetic, and superserviceable zeal.

* * *

The title "Africanus" formerly given to Scipio for his victories over the Carthaginians, has been conferred upon Stanley, a greater conqueror than Scipio. The victories of Stanley in his chosen field of action, have been greater than those achieved by any other man since the days of Christopher Columbus. A few years ago he was a newspaper man in America; he now patronizes kings. He is about to be married; and the gossip about the approaching wedding exhibits a striking contrast between masculine and feminine fame. With feelings of awe we read the important announcement sent over from England that Miss Tennant "has acquired a distinct fame in London for the quiet elegance of her gowns, and the number and variety of her parasols." The addition of this fame to the fame of Stanley makes a glory too dazzling for human eyes. The gossip who sent the information over is entitled to some praise for giving back to us the descriptive, modest, and musical word "gown," now almost obsolete. He forfeits his credit mark, however, when he tells us that Miss Tennant's brother "will probably appear at the altar of Hymen at the same time as his sister." By that exuberant figure of speech he meant to say that Miss Tennant's brother was to be married.

* * *

The ethics of the caucus was patriotically shown in the efforts of rival partisans to nominate a man for Congress in the Fourth District of Illinois. There were only two candidates, and the contest was close. Actuated by mutual ill-will, the two republican organs of Chicago took opposite sides, and each opposed the candidate supported by the other. The effect of their discordant efforts, if they spoke the truth, was a demonstration that neither of the candidates was morally or mentally fit for the place. The "workers" on either side, employed a couple of weeks very profitably in proving that their man ought to be in Congress and the other man in prison. When the convention met, the delegates resolved themselves into an uproarious mutual admiration society, the partisans of each candidate vigorously denouncing the other. One of the delegates enthusiastically advocated the claims of the present incumbent in a speech asserting the unfitness of the rival aspirant by reason of political incapacity, and various other accomplishments, ranging all the way from pitch and toss to manslaughter. This was well enough, but he wound up his Phillipic by declaring that if the unspeakable pretender he had exposed in the convention should receive the nomination, he would give him a loyal and cordial support. More wonderful than that was the editorial action of the paper which for several days had been filled with reasons why the present incumbent ought not to be renominated. The next morning after the nomination had been made, it contained an editorial article showing his eminent fitness for the position, and advising everybody to vote for him. The most humorous performance however, in this absurd comedy, was the speech of the winning man, congratulating the rival combatants on the "gentlemanly" contest through which they had lately passed. This apparent self-stultification is merely the effect of party discipline. These are the tactics adopted by both parties wherever they are in the majority, and thus they keep the ranks from breaking in the presence of "the common enemy." Most wonderful of all is the fact that those partisans figure in the census returns as free moral agents.

* * *

The acquittal of the men charged with conspiracy in hiring "repeaters" at the polls, and to commit various other election frauds, appears at first sight like a miscarriage of justice, but any citizen who has carefully read the details of the trial must have come to the conclusion that a conviction would have been a miscarriage of justice also. The tactics of the prosecution were unfair from the beginning to the end. They were in derogation of the law of trial by jury, and a perversion of its purposes. The practice of arresting a company of men under a vague accusation of "conspiracy," throwing them into jail, and then subjecting them to torture and temptation until some of them "squeal," is vicious as it is illegal. The harsh refusal to give to men on trial for felony a bill of particulars of the acts constituting the crime; the springing of sudden testimony upon them, the raking up of old misdeeds atoned for and forgotten, the offering to the jury the official belief of the State's attorney that the prisoners are guilty, and other police court practices, cause humane and thoughtful men to hope for a verdict of acquittal, in order that such methods may be rebuked. Better is it that a criminal go unpunished than that the law be broken in his trial. If a guilty man be convicted by guilty means, that is a miscarriage of justice.

* * *

The "word-painting" of reporters is usually a defacement of the language, and a blemish on its beauty, but occasionally it bears the mark of genius, as for instance in the following description of a man recently arrested in Chicago for complicity in the business of pool selling. He is described as an "ex-prizefighter, and professional bad man." This is not only description, but it is descriptive poetry. Carlyle himself, working at his literary forge, could hardly hammer out anything more symmetrical and strong. We have plenty of professional good men; they are in fact something of a drug in the market. There has never been a scarcity of them; they were numerous in Jerusalem long ago, where they had a habit of making long prayers and devouring widows' houses; but a professional bad man is a novelty, and surely the trade of "bad man" seems admirably adapted to the genius and education of an ex-prizefighter.

* * *

The particular "bad man" mentioned above appears to have well deserved the title, judging from a murderous remark he made to the officers who arrested him: "it's a lucky thing for you ducks that I was sober. If I was drinking you bet you wouldn't get me alive." The absence of the customary drunk was the only obstacle that lay between him and murder. Instead of blessing himself for his lucky escape from a great crime, he deplored his hard fortune that now when an opportunity had presented itself to kill a man, he must be unfortunately sober, and without the nerve that whiskey gives to do the deed What a worthy tribute was this to the infernal bravery of rum! Its potent inspiration was absent in this

case and therefore murder was not done. Not even a professional bad man could "screw his courage to the sticking point" without the propelling power of whiskey. M. M. TRUMBULL.

CORRESPONDENCE.

THE NEGRO'S APPRECIATION OF THE SUFFRAGE.

To the Editor of The Open Court :—

MR. WAKE in his paper on "The Race Question" in *The Open Court*, No. 148, says that if my statement on page 2134 of *The Open Court* be true,—viz., that laboring colored men in Florida "walk miles to the office of registration to insure the exercise of the ballot,"—the fact shows they appreciate the privilege of voting.

Some facts concerning the statement are these, which perhaps should have been given with it.

Our home was in the centre of a sparse settlement, and at a distance of three miles and a half south-west of "Singleton's Mill," which was the locality of the office of registration and the polling place for our "precinct." Those in the settlements to the south and west of us had of course an increased distance to go on registration and voting days. One day at noon I was at our avenue gate, and a gang of colored men from beyond us passed me on foot at a vigorous pace. I knew them as laborers on places a mile or more to the south. From their air of earnestness, I inquired what was up, expecting to hear that some calamity had befallen the settlement,—a wild fire in the woods, or something of the sort, and that they were going to help in the trouble. "We 're going to register," was the reply.

Every mile of travel in Florida sand and wire grass counts for two on northern highways. These men were taking a seven or eight mile (Florida miles) walk in the noon heat, which was a two hours' trip with a good horse and waggon, besides losing their earnings for the time spent. This occurrence was not a solitary one, for I never heard, during my years in the state, of a colored American selling his vote, or of his neglecting to vote. Such occurrences might have been, but if so, they certainly were not told of, as is so frequently told of northern voters.

Other instances connected with colored suffrage in Florida, impressed me quite as much as this of the company of laborers going to register. MARY GUNNING.

NO RESPONSIBILITY, IN A RELIGIOUS SENSE.

To the Editor of The Open Court :—

FROM the rationalistic standpoint it is an infringement upon reason to use such a contradiction of terms as law and freedom. If we are under a dispensation of law, we are not under one of freedom. Right reason can never prevail by such confusion. Science has nothing to do with the Calvinistic way of reasoning; by it (science) the human mind must not be left in a strait betwixt two. The right premise once obtained, confusion ceases. This age demands a right premise in order to arrive at right conclusions. That premise cannot logically be law and freedom. Science cannot afford to pose before the intelligence of this nineteenth century as ridiculously as religion did in the late Presbyterian assembly; cannot afford to arrive at its conclusions by majority vote. It will not do either to take Epictetus, Schiller, and all ethical teachers as an authority to show that man is free and therefore responsible. All authority must have its root in natural law, not in human assumptions. The credential of gravity is in the falling of a stone and the credential of human freedom would be in showing that human actions are not subject to law. Two journals are running in a mill. Both are subject to the laws, or conditions of bearing, box, and motive power. One runs without undue friction, the other does not. Here is exemplified your slave and your artist; the first works under a combination which produces friction, but the latter, under one which produces harmony; but both are subject to law. Now if a journal gets hot by undue friction we do not stop it and use means to cool it off because it was free, but because, for the safety of the mill, it would not do to let it continue to run by the dangerous laws or conditions which governed it. So it is with vicious men: nature, by its adjuncts, does not oppose the criminally inclined because they are free, but because they are not fit to express themselves as the laws of their organizations would force them. Accountability from the standpoint of nature is simply what a break is to a wheel. By the operation of natural law in a circle we are forced to deal with things that are not as though they were. Poets, theologians, and ethical teachers reasoned from a premise which was assumed by Pagans. They had to conclude therefore that man was free and that he ought to be held responsible both in this world and the next, and through fear justified a God and condemned man. But by the light of natural law and reason let me be found standing in defence of man. This I say, then: there is no such thing as law and freedom, but there is law; and harmony and inharmony to man under law. There are opposing forces to vicious actions, but no responsibility in the sense of religion.

JOHN MADDOCK.

BOOK REVIEWS.

L'Eredità delle Lesioni Traumatiche, e dei Caratteri Acquisiti dall' Individuo. Studi ed Esperienze.* By *Paolo Mantegazza*. From "Archivio per l'Antropologia e la Etnologia." Vol. XIX. Fasc. 3.

In the past more attention has been paid to vast accumulations of curious isolated facts, than to a careful observation of the same; and hence into the annals of heredity there have crept a great many incorrect and exaggerated opinions. At the present day, however, the study of heredity is deeply engaging the attention of biologists and of natural scientists, and is being submitted to a strictly scientific treatment. Through its manifold relations to general morphology, to the variable or immutable characteristics of the species, heredity, incontestably, constitutes a *predominant* fact in biology. No one can legitimately profess to be a follower or antagonist of Darwin, without possessing a clear notion of the power of individuals to transmit to their progeny their own permanent or acquired characteristics. If after the lapse of so many years, and so many able works, written upon the subject, we still evince so much incertitude in tracing the precise limits of the mutability of the species, it is simply because our opinions rest upon the ever-shifting ground of facts that are well-authenticated only to some, but highly problematic to others. To help to consolidate this uncertain and unsatisfactory basis is the principal aim of Prof. Mantegazza's monograph.

Lamarck was the first who carried the problem of heredity and of the mutability of the species into the domain of natural science. To him any individual, changing its surroundings, is compelled to modify itself, increasing or diminishing by alternate turns the evolution of a given organ. It is further able to transmit to its progeny these new characteristics that are the result of a strugele and of a victory over external conditions. If the progeny remains in the same locality, through successive generations it will be able to consolidate the newly acquired characteristics, until their sum reach a maximum, compatible with the capacity of the histological elements. This, substantially, furnished the seed from which arose the great tree of Darwinism, with all the branches and ramifications of the evolutionary theory.

But, we have to keep constantly in view the incontestable fact, that it is impossible to be evolutionists without admitting that the

* "The Heredity of Traumatic Lesions. And concerning acquired individual characteristics. Studies and experiments."

characteristics acquired by the individual are transmitted through heredity to successive generations. We may disagree in regard to the *quantum* of this transmission, but if we could prove that this heredity did not take place, the theory of evolution would lose its centre of gravity.

Prof. Mantegazza limits himself to the study of one or two striking phases of the question; namely, the *heredity of traumatic lesions*, on the present occasion suggested by Dr. Aug. Weismann's masterly treatise upon the subject (*Ueber die Hypothese einer Vererbung von Verletzungen, etc.*, Jena, 1889). If upon the mutilation of an organ not indispensable to life we find that the offspring of the animal is born with the same mutilation, we would no longer be able to doubt the heredity of acquired individual characteristics, and the experiments of the laboratory would admirably seem to confirm our observation of the facts of nature. The joint experiments of Dr. Weismann and Prof. Mantegazza, however, are by no means favorable to the theory of the supposed heredity of traumatic lesions, although the variant facts furnished by these experiments may not be regarded as absolutely conclusive. Still, to deny the heredity of traumatic lesions is not to deny the transmission of characteristics acquired by the individual, through the influence of external agents. *γνλν.*

THEODORE PARKER. A Lecture. By *Samuel Johnson*. Edited by John H. Clifford and Horace L. Traubel. Chicago: Charles H. Kerr & Co. 77 pp. Price $1.00.

The editors have brought together in this tastefully bound volume the substance of a lecture which Mr. Johnson had written on Theodore Parker and which he had subjected to many revisions. Few may be regarded as so well qualified as Mr. Johnson to portray the tendencies of the great religious movement of which Theodore Parker was the leader; and additional value attaches to the work from the fact that it is not wholly eulogy, but also an estimate. Parker, Mr. Johnson says, is the prophet, the fore-runner of that great future religion which shall be intellectually and spiritually broad, deep, and earnest enough to lift all our present secular interests, our materialistic passions and desires to an ideal purpose. *μκρκ.*

BOOK NOTICES, NOTES, ETC.

Gen. M. M. Trumbull contributes to the July *Belford's* an article on the Chartist Movement in England; and Dr. Felix L. Oswald, an essay on Storms and Earthquakes.

The Vedantin, of Saidapet, Madras, is a little monthly magazine devoted to the exposition of the Advaita Doctrine. The translations from the religious works as well as the contributions appearing in this magazine, contain many noble thoughts.

"Christ: A Comparative Study," author's name not given (Brentano's, 15 cents), is a thirty-one paged pamphlet written to point out the close resemblance between Buddhism and Christianity: it cites "parallel passages" from the books of the two religions.

The publication was announced some time ago of a new Medical Dictionary by Dr. George M. Gould. By its compactness, size, and the incorporation of all new technical terms, it will recommend itself to all practitioners and students. (P. Blakiston, Son, & Co., Philadelphia. Price, $3.25.)

The *Preussische Jahrbücher*, a Prussian periodical of very high standing, publishes in Vol. 65, No. 6, an article on the Schools of the United States, by Thomas H. Jappe, Instructor in German at the schools of Des Moines, Iowa. It is instructive to contrast the readiness that Prussia has always evinced, by comparative studies, to learn from foreign countries; though, in this particular case, we fear she has little to learn from us.

The New Review for June publishes a beautiful Roumanian Soldier Ballad by 'Carmen Sylva,' the Queen of Roumania; in the same magazine an article on Hypnotism appears. (Longmans.)

Mr. M. M. Pomeroy ("Brick") has published in the "Birch Bark" Series the story of his life; written for boys and girls. (The Advance Thought Pub. Co., N. Y., 251 pp. Price, 50 cents.)

The Senior Classmen of the Missouri School of Mines have begun the publication of a new quarterly "of scientific research." Its pages will be open to contributions in Mathematics, Physics, and the exact sciences generally. We trust that it will be very effective in the dissemination of scientific thought. (*Scientiæ Baccalaureus*, Rolla, Mo.)

"Liberty and Life" is the title of a little book of 208 pages, by Mr. E. P. Powell, published (1889) by the Messrs. Charles H. Kerr & Co., of Chicago. It is made up of a series of attractively written discourses, expounding the new views of life that result from the acceptance of the doctrine of evolution. It is supplementary to the "Heredity of God." (Price, 75 cents.)

We are pleased to note among 'Topics of the Time' in the July *Century* a short article "On Lack of Conscience as a Means of Success." The ethical fallacy that lies at the basis of this so prevalent belief has more than once been spoken of in *The Open Court*. Says the writer in *The Century*: "One proof that the smart rogue is not so smart as he thinks, and as others think, is that he so often comes to grief. He arrives at his successes through his knowledge of the evil in men; *he comes to grief through his ignorance of the good in men. He thinks he knows 'human nature,' but he only half knows it.*"

The first number of the *Annals of the American Academy of Political and Social Science* has appeared. It contains the following articles: "Canada and the United States," by J. G. Bourinot; "Decay of Local Government in America," by S. N. Patten; "Law of Wages and Interest," by J. B. Clark; "Province of Sociology," by F. H. Giddings; "Instruction in Public Law and Economics in Germany," by Leo. S. Rowe; and "Railroad Passenger Fares in Hungary," by Jane J. Wetherell; besides a report of the proceedings of the Academy, Personal Notes, Book Reviews, and Miscellany. Though the purpose of this magazine is eminently a special one, yet the subjects discussed are of such general interest and the manner in which they are handled so popular that we have no doubt it will find a large circulation among all classes of reflective readers. This it assuredly deserves. (Am. Acad. of Political and Social Science, Station B, Philadelphia.)

We have upon our table the following pamphlets and brochures: "The Working Population of Cities, and What the Universities owe them," by M. I. Swift (Reprinted from the "Andover Review" for June, 1890); "Hell, Where is it?" and "Robert Burns, Was he a Christian?" by Saladin (London: W. Stewart & Co.); "The Power of Thought in the Production and Cure of Disease," by Dr. Wm. H. Holcombe (Chicago: Purdy Publishing Co.); "Would Nationalism Destroy Individuality?" by Charles E. Barnes (Lansing, Michigan: Robert Smith & Co.); "The History of Federal and State Aid to Higher Education in the United States," by Frank W. Blackmar, Ph. D. (Washington: Government Printing Office); "Ametropic Choroido-Retinitis (Central Choroiditis)," by George M. Gould, M. D. (Archives of Ophthalmology, Vol. xix, No. 1, 1890); "Questions for Debate in Politics and Economics, with Subjects for Essays and Terms for Definition" (New York: Society for Political Education); "Man and Humanity," by Rev. Isaac S. Moses (Milwaukee, Wis); "Digging for Bedrock," by Moses Harman (Lucifer Publishing Co., Valley Falls, Kansas); "Proceedings of the Department of Superintendence of the National Educational Association" (Washington: Government Printing Office).